

REMARKS

Prior to entry of this amendment, claims 1-38 are currently pending in the subject application. By the instant amendment, claims 1, 6, 9-10, 14-16, 18-19, 23-25, 29-31, 33-34 and 36-37 have been amended, and claims 5, 12 and 17 have been cancelled. Claims 1, 19, 25, 29, 33 and 36 are independent claims.

Applicants note with appreciation the Examiner's consideration of applicants' Information Disclosure Statement filed on May 19, 2005.

Applicants respectfully request, in connection with the next Office action, the Examiner's acknowledgement of applicants' claim for foreign priority and receipt of a certified copy of the priority document.

Applicants further respectfully request, in connection with the next Office action, the Examiner's acknowledgement and acceptance of the original drawings filed on February 26, 2004, the replacement drawings filed on July 16, 2004, and the replacement drawings filed on October 8, 2004.

A. Introduction

In the outstanding Office action, the Examiner rejected claims 1-8, 25-28, and 33-35 under 35 U.S.C. § 101 as directed toward non-statutory subject matter; objected to claim 12 under 37 C.F.R. § 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim; rejected claims 5, 9, 10 and 14-15 under 35 U.S.C. § 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements; and rejected claims 1-38 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,888,627 to Leslie et al. ("the Leslie et al. reference").

B. Asserted Rejection of Claims 1-8, 25-28 and 33-35 as Non-Statutory Subject Matter

In the outstanding Office action, the Examiner rejected claims 1-8, 25-28 and 33-35 under 35 U.S.C. § 101 as directed toward non-statutory subject matter. Independent claims 1, 25 and 33 have been amended to clarify that the claimed method is directed toward identifying types of defects on a surface of an object. Therefore, it is respectfully submitted that claims 1, 25 and 33 as amended are directed toward a statutory subject matter. Similarly, claims 7-8, 24-28 and 32-35 as dependent from independent claims 1, 25 and 33, respectively, are believed directed toward a statutory subject matter. Accordingly, applicants respectfully request that the rejection of claims 1-8, 25-28 and 33-35 be favorably reconsidered and withdrawn.

C. Objection to Claim 12

In the outstanding Office action, the Examiner objected to claim 12 under 37 C.F.R. § 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. By the instant amendment claim 12 has been cancelled, and, accordingly, Applicants respectfully request that the objection to claim 12 under 37 C.F.R. § 1.75(c) be withdrawn.

D. Asserted Indefiniteness Rejections of Claims 5, 9-10 and 14-15

In the outstanding Office action, the Primary Examiner rejected claims 5, 9, 10 and 14-15 under 35 U.S.C. § 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural relationships.

Claim 5 has been cancelled, and claims 9-10 and 14-15 have been amended to traverse the rejection thereof under 35 U.S.C. § 112, second paragraph. More specifically, claims 9-10 have been amended to clarify positions of the mirrors of the inventive apparatus and claims 14-

15 have been amended to clarify the direction of irradiated light with respect to the inventive apparatus. Support for these amendments is found in FIG. 17 and corresponding text and in FIGS. 9-10 and corresponding text, respectively.

Accordingly, it is believed that the rejection under 35 U.S.C. § 112, second paragraph, has been traversed by the preceding amendments, and applicants respectfully request favorable reconsideration and withdrawal of the rejections of claims 9-10 and 14-15 under 35 U.S.C. § 112, second paragraph.

E. Asserted Obviousness Rejection of Claims 1-38

In the outstanding Office action, the Primary Examiner rejected claims 1-38 under 35 U.S.C. § 103(a) as being unpatentable over the Leslie et al. reference. Applicants respectfully traverse the obviousness rejection and request its favorable reconsideration and withdrawal.

In the outstanding Office action, the Examiner admitted with respect to independent claim 1 that the Leslie et al. reference does not expressly disclose classification of defects. *Office Action mailed August 24, 2006, at p. 5.* The Examiner asserted, however, that “Leslie does show that the goal of the invention is to improve upon the prior art and Leslie discloses that the prior art classified defects... Therefore, it would be obvious that the apparatus of Leslie classifies defect.” *Id.* Applicants respectfully disagree for at least the reasons set forth below.

It is well-settled law that for a claimed invention to be rejected on grounds of obviousness, the prior art must suggest the modifications sought to be patented. *See In re Gordon*, 221 USPQ 1125, 1127 (Fed. Cir. 1984); *see also ACS Hospital Systems, Inc. v. Montefiore Hospital*, 221 USPQ 929, 933 (Fed. Cir. 1984). In fact, the United States Court of Appeals for the Federal Circuit (“Federal Circuit”) has stated: “[w]hen determining the patentability of a claimed invention which combines two known elements, ‘the question is

whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.”” *In re Beattie*, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992) (quoting *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 488 (Fed. Cir. 1984)). In the instant application, however, the Examiner offers no suggestion or motivation for the proposed modification and element combination.

In particular, the cited prior art is directed toward a system and method distinguishing between intentional patterns on a wafer and unwanted anomalies thereon by using symmetrical light reflections. *Leslie*, cols. 7-8, lines 54-22; col. 15, lines 2-5. The subject matter of the present invention, on the other hand, relates to a specific problem associated with identifying and distinguishing specific types of unwanted defects on a wafer, such as particles, scratches, and so forth. *Application as filed*, Table 2. More specifically, the present invention as claimed is directed to an apparatus and method for automatically scanning a wafer and identifying all defects thereon according to types and sizes within about 3 to about 6 minutes. *Application as filed*, page 9, ¶133. In fact, Applicants specifically state that the inventive apparatus is capable of detecting defects, i.e., unwanted anomalies, while minimizing detection of intentional surface patterns. *Application as filed*, pages 6-7, ¶ 106. Accordingly, the present application and the cited prior art are directed toward different subject matters.

Since the cited reference does not teach, or even remotely suggest, identification of different types of unwanted defects on a wafer, much less identification thereof within 3 to about 6 minutes, it is unclear how the cited prior art can be said to suggest the subject matter of the present invention or proper modifications thereof in order to achieve and arrive at the inventive method and apparatus. Accordingly, applicants respectfully request favorable reconsideration of the rejection of claims 1-38 under 35 U.S.C. §103(a) and its withdrawal.

F. Conclusion

The remaining documents cited by the Primary Examiner were not relied on to reject the claims. Therefore, no comments concerning these documents are considered necessary at this time.

If the Primary Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Primary Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,

LEE & MORSE, P.C.

Date: November 21, 2006


Eugene M. Lee, Reg. No. 32,039

LEE & MORSE, P.C.
3141 FAIRVIEW PARK DRIVE
SUITE 500
FALLS CHURCH, VA 22042
703.207.0008 TEL
703.207.0003 FAX

PETITION and
DEPOSIT ACCOUNT CHARGE AUTHORIZATION

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.